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Brief Information on ROSE SLUGS and THEIR CONTROL.

Character and Extent of Damage. - Rose leaves are frequently found skeletonized or to have a ragged appearance. Such conditions do not seriously affect the vitality of the plant, but as the rose bush is cultivated entirely for crnamental purposes, the marred foliage is a decided detriment to its appearance. This is the work of rose slugs of which there are three species in America.

## Evidence of Infestation .-

- I. Leaves skeletonized from above by soft, delicate, greenish yellow "yorms" about 1/3 inch long (European rose slug).
- II. Leaves rendered ragged by yellowish green "worms" with bristly hairs, which are located on the under side of the leaves (Bristly rose slug).
- III. Leaves with edges eaten by smooth metallic green "worms" with white spots above and grayish white below (Coiled rose slug).

Characters of the Insects and the Habits. - The adult forms of these insects are small, four winged, fly-like bees which are seldom seen. The eggs are laid by the females in the plant tissue by means of a saw-like ovipositor or sting. The young stage, known as slugs or false caterpillars, (as described under I, II and III) feed on the leaves until full grown, when I goes in the ground and makes a thin papery cocoon, II attaches its cocoon to the leaves or stems and III enters the dead stems of plants or soft wood, etc. and makes its cocoon there. They all either remain in their cocoon, overwinter and transform to adults and come out the next spring or transform and come out the same season.

### Remedies . -

btrong stream of water applied often and at all angles.

Stomach poisons, like lead arsenate or Paris green (procurable in the market with directions for preparation and application on the containers).

Heliebore (also procurable in the market with necessary instructions).
No.e. - If the slugs are allowed to hibernate, proceed to destroy their cocoons in accordance with the species, as follows:

- I. Cultivate the ground.
- II. Burn all leaves beneath bushes.
- III. Burn all dead twigs and brashy wood; examine ends of all pruned twigs for cocoons.

(The same Roman numerals refer to the same species throughout.)

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